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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,268

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Tsuneo Nakata

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EXAMINER

FIALKOWSKI, MICHAEL R

ART UNIT

PAPER NUMBER

4173

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,268	Applicant(s) NAKATA, TSUNEO	
	Examiner MICHAEL FIALKOWSKI	Art Unit 4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>August 23 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Objections

3. Claims 1,3, and 10,12,and 13 are objected to because of the following informalities:

Re claim 1, Applicant recites in part on line 12, "reflecting into a resource allocation". Examiner cannot determine the use of "into" or what "reflecting into"

Art Unit: 4173

exactly means. Examiner suggests deleting the word "into" or other correction to make grammatical sense.

Re claim 3, Applicant recites in part on line 1, "in a work for disconnecting the circuit". Examiner cannot determine the use of "a work" or what "a work" exactly means.

Re claim 10, Applicant recites in part on line 24, "in a work for disconnecting the circuit". Examiner cannot determine the use of "a work" or what "a work" exactly means.

Re claims 12 and 13, Applicant recites in part, "updating the circuit administration table to reflect this". There is insufficient antecedent basis for "this" and it may refer to the "information in the network side" or "information in the terminal side". However, the claim is worded such that "this" refers to "based upon information in the network/terminal side", which does not make grammatical sense.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Re claim 1, Claim 1 is directed to a mobile subscriber network. The network is "characterized in including" a circuit administration table and two functions for the table.

Art Unit: 4173

A table, list, array, or other database of information in itself is non-patentable subject matter for failing to fall into the categories of process, machine, manufacture, or composition of matter. Further, the table and functions performed therein, are neither claimed nor taught in the specification as being located in hardware or a software medium. Therefore, the table and its functions could be either or merely an abstraction of thought and written on paper. Based on this reasoning Claims 1-7 are rejected for being non-statutory and failing to meet the requirements of 35 USC §101. Re Claim 8, in Claim 8, a method for resource administration is claimed. The limitation of a method step of retaining information follows the same reasoning as stated above for being non-statutory. In claim 8, there is a limitation for a method step of carrying out a resource allocation to each circuit. Again, this step can either be performed in software or hardware and no mention of hardware is made in the claims or specification. Therefore, Claims 8-13 are rejected for failing to meet the requirements of 35 USC §101.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (2003/0064730).

Re claim 1, Chen et al discloses a mobile subscriber network (mobile communication system [0019], [xxxx] herein referring to paragraph [0019]), characterized in including: a circuit administration table (for example, see table of Figure 12A) for retaining a many-versus-one correspondence between circuit terminals (See Figure 1, signals are multiplexed in label 111, thus multiple terminals) and a subscriber (for example, mobile station in Figure 1); a means for (resources amount confirmation circuit [0083]) reflecting a new circuit request (base station waits for connection request, checks the remaining resource amount and calculates QoS [0099]) or a change in a network state into said circuit administration table, thereby to dynamically update said circuit administration table; and a means for (reassignment transmission rate calculation circuit [0083]), based upon said circuit administration table, reflecting into a resource allocation to each circuit (resources are reassigned to each mobile station after a new transmission request [0107]).

Re claim 2, Chen et al discloses the mobile subscriber network characterized in including a means for (reassignment transmission rate calculation circuit [0083]), in requesting a circuit setting by the subscriber, or in handing over the circuit in use (a handover request is originated [0109]), making a reference to a state of the other circuit of the subscriber that is obtained from said circuit administration table (users in the same service class are accompanied with movement in a state where resources are reallocated [0109]), thereby to compute a circuit number or a bandwidth that said subscriber can use (resources are allocated so as both users in the service class can have a transmission rate of 256 kbps (bandwidth), for example [0109]).

Re claim 3, Chen et al discloses the mobile subscriber network characterized in including a means for calculating the circuit that is disconnected (it is monitored whether resources are released [0103]) based upon the circuit administration table in a work for disconnecting the circuit that a fixed network starts (if some resources are released, the transmission rate of the user of each class is checked [0103]).

Re claim 4, Chen et al discloses the mobile subscriber network characterized in including a means for changing (reassignment transmission rate calculation circuit [0083]) a resource allocation priority degree (resource reassignment [0113] - [0114]) of the circuit that is affected due to updating said circuit administration table (for example, it is possible to adjust the degree of fairness among users of different service classes [0101]).

Re claim 5, Chen et al discloses the mobile subscriber network characterized in including a means for reflecting the updating of the circuit administration table into the resource allocation to each circuit (generates notification information for notifying the determined transmission rate, modulation method, and radio resources [0083]) by communication with a circuit-setting means (notification information control circuit [0083]).

Re claim 6, Chen et al discloses the mobile subscriber network characterized in including a means for reflecting the updating of the circuit administration table into the resource allocation to each circuit (generates notification information for notifying the determined transmission rate, modulation method, and radio resources [0083]) by

Art Unit: 4173

communication with the circuit terminal (notification information control circuit [0083] is connected to signal multiplexing circuit, label 111 in Figure 1).

Re claim 7, Chen et al discloses the mobile subscriber network characterized in including a means for retaining a service condition (service class) of the subscriber in the circuit administration table (see Figure 13A, for example, for different service classes 1 and 2) to reflect this service condition into the resource allocation (for example in Figure 13A, Class 1 has a transmission rate of 1.5Mbps and Class 2 has a transmission rate of 3Mbps).

Re claim 8, Chen et al discloses a resource administration method, characterized in including the steps of: retaining information (for example, see table of Figure 12A) of a one-versus-many correspondence (See Figure 1, signals are multiplexed in label 111, thus multiple terminals) between a subscriber (for example, mobile station in Figure 1) and a circuit with which said subscriber enters into a contract and reflecting a new circuit request (base station waits for connection request, checks the remaining resource amount and calculates QoS [0099]) or a change in a network state into a circuit administration table (for example, see Figure 12A, where C is a new request) , thereby to dynamically update said circuit administration table; and carrying out a resource allocation to each circuit based upon said circuit administration table (resources are reassigned to each mobile station after a new transmission request [0107]).

Re claim 9, Chen et al discloses the resource administration method characterized in including a step of, in requesting a circuit setting by the subscriber, or

Art Unit: 4173

in handing over the circuit in use (a handover request is originated [0109]), making a reference to a state of the other circuit of said subscriber that is obtained from the circuit administration table (users in the same service class are accompanied with movement in a state where resources are reallocated [0109]), thereby to compute a circuit number or a bandwidth that said subscriber can use (resources are allocated so as both users in the service class can have a transmission rate of 256 kbps (bandwidth), for example [0109]).

Re claim 10, Chen et al discloses the resource administration method characterized in including a step of calculating the circuit that is disconnected (it is monitored whether resources are released [0103]) based upon said circuit administration table in a work for disconnecting the circuit that a fixed network starts (if some resources are released, the transmission rate of the user of each class is checked [0103]).

Re claim 11, Chen et al discloses the resource administration method characterized in including a step of changing (through a reassignment transmission rate calculation circuit [0083]) a resource allocation priority degree (resource reassignment [0113—[0114]) of the circuit that is affected due to updating said circuit administration table (for example, it is possible to adjust the degree of fairness among users of different service classes [0101]).

Re claim 12, Chen et al discloses the resource administration method characterized in including a step of, based upon information in the network side (downlink communication [0089]), updating the circuit administration table to reflect this

into the resource allocation to each circuit (information concerning the amount of radio resources and modulation method becomes the downlink information [0089]).

Re claim 13, Chen et al discloses the resource administration method characterized in including a step of, based upon information in the terminal side (for example, mobile station in Figure 1 is on the terminal side), updating the circuit administration table to reflect this into the resource allocation to each circuit (for example, see Figure 12A, where C is a new request and resources are reassigned to each mobile station after a new transmission request [0107]).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ramos et al (2004/0053630) is cited for containing a plurality of users in a mobile communication environment and managing resources in that environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL FIALKOWSKI whose telephone number is (571)270-5425. The examiner can normally be reached on Monday - Friday 9:30am-7pm EST, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinhee Lee can be reached on (571)272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4173

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jinhee J Lee/
Supervisory Patent Examiner, Art Unit 4173

/M. F./
Examiner, Art Unit 4173